Paul J Mccullagh

List of Publications by Citations

116 papers	1,290 citations	21 h-index	31 g-index
127 ext. papers	1,534 ext. citations	2.3 avg, IF	4.37 L-index

#	Paper	IF	Citations
116	Ambient Intelligence: Concepts and applications. *Computer Science and Information Systems*, **2007**, 4, 1-27	0.8	113
115	Feature selection and classification model construction on type 2 diabetic patients' data. *Artificial Intelligence in Medicine*, **2007**, 41, 251-62	7.4	88
114	Activity Monitoring Using a Smart Phone's Accelerometer with Hierarchical Classification **2010**,		48
113	Management of Uncertainty and Spatio-Temporal Aspects for Monitoring and Diagnosis in a Smart Home. *International Journal of Computational Intelligence Systems*, **2008**, 1, 361-378	3.4	44
112	A review of the role of assistive technology for people with dementia in the hours of darkness. *Technology and Health Care*, **2009**, 17, 281-304	1.1	43
111	Smart self management: assistive technology to support people with chronic disease. *Journal of Telemedicine and Telecare*, **2010**, 16, 224-7	6.8	40
110	Feature learning for Human Activity Recognition using Convolutional Neural Networks. *CCF Transactions on Pervasive Computing and Interaction*, **2020**, 2, 18-32	1.8	37
109	A review of rapid serial visual presentation-based brain-computer interfaces. *Journal of Neural Engineering*, **2018**, 15, 021001	5	37
108	**2011**, 49, 110-117		35
107	Flexible context aware interface for ambient assisted living. *Human-centric Computing and Information Sciences*, **2014**, 4,	5.4	34
106	Optimal model selection for posture recognition in home-based healthcare. *International Journal of Machine Learning and Cybernetics*, **2011**, 2, 1-14	3.8	33
105	Ethical Challenges Associated with the Development and Deployment of Brain Computer Interface Technology. *Neuroethics*, **2014**, 7, 109-122	1.2	32
104	Synthesising the 12-lead electrocardiogram: Trends and challenges. *European Journal of Internal Medicine*, **2007**, 18, 566-70	3.9	29
103	Participatory research to design a novel telehealth system to support the night-time needs of people with dementia: NOCTURNAL. *International Journal of Environmental Research and Public Health*, **2013**, 10, 6764-82	4.6	28
102	Data and Information Quality Issues in Ambient Assisted Living Systems. *Journal of Data and Information Quality*, **2012**, 4, 1-15	2.5	28
101	Automatic Annotation for Human Activity Recognition in Free Living Using a Smartphone. *Sensors*, **2018**, 18,	3.8	27
100	Neuroaffective processing in criminal psychopaths: brain event-related potentials reveal task-specific anomalies. *Journal of Personality Disorders*, **2007**, 21, 322-39	2.6	26

99	Optimal electrocardiographic lead systems: practical scenarios in smart clothing and wearable health systems. *IEEE Transactions on Information Technology in Biomedicine*, **2008**, 12, 433-41		23
98	An optimization of ReliefF for classification in large datasets. *Data and Knowledge Engineering*, **2009**, 68, 1348-1356	1.5	22
97	Technology-mediated therapy for chronic pain management: the challenges of adapting behavior change interventions for delivery with pervasive communication technology. *Telemedicine Journal and E-Health*, **2011**, 17, 211-6	5.9	22
96	. *IEEE Transactions on Human-Machine Systems*, **2017**, 47, 814-821	4.1	21
95	Qualitative evaluation of the SMART2 self-management system for people in chronic pain. *Disability and Rehabilitation: Assistive Technology*, **2015**, 10, 53-60	1.8	19
94	Management of Uncertainty and Spatio-Temporal Aspects for Monitoring and Diagnosis in a Smart Home. *International Journal of Computational Intelligence Systems*, **2008**, 1, 361	3.4	19
93	A smartphone based real-time daily activity monitoring system. *Cluster Computing*, **2014**, 17, 711-721	2.1	18
92	An ontological framework for activity monitoring and reminder reasoning in an assisted environment. *Journal of Ambient Intelligence and Humanized Computing*, **2013**, 4, 157-168	3.7	15
91	A Supervised Learning Approach to Predicting Coronary Heart Disease Complications in Type 2 Diabetes Mellitus Patients **2006**,		13
90	Selection of optimal recording sites for limited lead body surface potential mapping: a sequential selection based approach. *BMC Medical Informatics and Decision Making*, **2006**, 6, 9	3.6	13
89	Auditory brainstem response classification: a hybrid model using time and frequency features. *Artificial Intelligence in Medicine*, **2007**, 40, 1-14	7.4	12
88	Realistic expectations with brain computer interfaces. *Journal of Assistive Technologies*, **2012**, 6, 233-244		11
87	Investigation into a Mixed Hybrid Using SSVEP and Eye Gaze for Optimising User Interaction within a Virtual Environment. *Lecture Notes in Computer Science*, **2013**, 530-539	0.9	11
86	Contrasting levels of accuracy in command interaction sequences for a domestic brain-computer interface using SSVEP **2010**,		10
85	Optimizing the 12-lead electrocardiogram: a data driven approach to locating alternative recording sites. *Journal of Electrocardiology*, **2007**, 40, 292-9	1.4	10
84	. *IEEE Transactions on Human-Machine Systems*, **2018**, 48, 113-124	4.1	10
83	Design of a smart insole for ambulatory assessment of gait **2015**,		9
82	An orientation free adaptive step detection algorithm using a smart phone in physical activity monitoring. *Health and Technology*, **2012**, 2, 249-258	2.1	9

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81	Feature selection and classification in supporting report-based self-management for people with chronic pain. *IEEE Transactions on Information Technology in Biomedicine*, **2011**, 15, 54-61		9
80	A user centred approach for developing Brain-Computer Interfaces **2010**,		9
79	A theoretic algorithm for fall and motionless detection **2009**,		9
78	Mining for diagnostic information in body surface potential maps: a comparison of feature selection techniques. *BioMedical Engineering OnLine*, **2005**, 4, 51	4.1	9
77	Night optimised care technology for users needing assisted lifestyles. *Behaviour and Information Technology*, **2014**, 33, 1261-1277	2.4	8
76	Investigating the use of brain-computer interaction to facilitate creativity **2012**,		7
75	An electrocortical correlate of a history of alcohol abuse in criminal offenders. *Psychology, Crime and Law*, **2001**, 7, 105-117	1.4	7
74	An Ontology-Based Context-aware Approach for Behaviour Analysis. *Atlantis Ambient and Pervasive Intelligence*, **2011**, 127-148		7
73	State of the art on night-time care of people with dementia **2009**,		7
72	A Personalized Self-Management Rehabilitation System for Stroke Survivors: A Quantitative Gait Analysis Using a Smart Insole. *JMIR Rehabilitation and Assistive Technologies*, **2016**, 3, e11	3.2	7
71	Knowledge transfer for technology based interventions: Collaboration, development and evaluation. *Technology and Disability*, **2012**, 24, 233-243	0.7	6
70	A sleep pattern analysis and visualization system to support people with early dementia **2011**,		6
69	Activity monitoring using an intelligent mobile phone **2010**,		6
68	Evaluation of Outcome Prediction for a Clinical Diabetes Database. *Lecture Notes in Computer Science*, **2004**, 181-190	0.9	6
67	Wearable technology-based metrics for predicting operator performance during cardiac catheterisation. *International Journal of Computer Assisted Radiology and Surgery*, **2019**, 14, 645-657	3.9	6
66	Comparing CNN and Human Crafted Features for Human Activity Recognition **2019**,		6
65	Accessing Tele-Services Using a Hybrid BCI Approach. *Lecture Notes in Computer Science*, **2015**, 110-123	0.9	5
64	An Efficient Feature Selection Method for Activity Classification **2014**,		5

63	Design and Evaluation of a Smartphone Based Wearable Life-Logging and Social Interaction System **2014**,		5
62	**2015**,		5
61	Self-management of COPD **2014**,		5
60	Evaluation of connected health technology. *Technology and Health Care*, **2012**, 20, 151-67	1.1	5
59	Mining, knowledge and decision support. *Technology and Health Care*, **2010**, 18, 429-41	1.1	5
58	Multi-agent Interactions for Ambient Assisted Living **2011**,		5
57	Personalisation and configuration of assistive technologies. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2008**, 2008, 3304-7	0.9	5
56	The Optimisation of Thresholding Techniques for the Identification of Choroidal Neovascular Membranes in Exudative Age-Related Macular Degeneration **2006**,		5
55	Speed of Rapid Serial Visual Presentation of Pictures, Numbers and Words Affects Event-Related Potential-Based Detection Accuracy. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2020**, 28, 113-122	4.8	5
54	Personalizing Activity Recognition With a Clustering Based Semi-Population Approach. *IEEE Access*, **2020**, 8, 207794-207804	3.5	5
53	BCI and Eye Gaze: Collaboration at the Interface. *Lecture Notes in Computer Science*, **2015**, 199-210	0.9	4
52	Science versus design; comparable, contrastive or conducive?. *Journal of the Mechanical Behavior of Biomedical Materials*, **2013**, 21, 195-201	4.1	4
51	The Brain Computer Interface: Barriers to Becoming Pervasive. *Human-computer Interaction Series*, **2014**, 101-129	0.6	4
50	Evaluation of a technology enabled garment for older walkers. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2012**, 2012, 2100-3	0.9	4
49	Towards a Decision Support Personalised Self Management System for Chronic Conditions **2008**,		4
48	An SSVEP and Eye Tracking Hybrid BNCI: Potential Beyond Communication and Control. *Lecture Notes in Computer Science*, **2016**, 69-78	0.9	4
47	Reliability of Location Detection in Intelligent Environments. *Advances in Intelligent and Soft Computing*, **2011**, 181-188		4
46	An Ontological Approach for Context-Aware Reminders in Assisted Living Behavior Simulation. *Lecture Notes in Computer Science*, **2011**, 677-684	0.9	4

45	A Smart Garment for Older Walkers. *Lecture Notes in Computer Science*, **2012**, 258-261	0.9	4
44	Patient and carer survey of remote vital sign telemonitoring for self-management of long-term conditions. *BMJ Health and Care Informatics*, **2019**, 26,	2.6	4
43	A Public Domain Dataset for Human Activity Recognition in Free-Living Conditions **2019**,		4
42	Can brain computer interfaces become practical assistive devices in the community?. *Studies in Health Technology and Informatics*, **2010**, 160, 314-8	0.5	4
41	Home-Based Self-Management of Dementia: Closing the Loop. *Lecture Notes in Computer Science*, **2015**, 232-243	0.9	3
40	. *IEEE Transactions on Human-Machine Systems*, **2020**, 50, 277-286	4.1	3
39	Knowledge discovery from activity monitoring to support independent living of people with early dementia **2012**,		3
38	A Platform for Self-Management Supported by Assistive, Rehabilitation and Telecare Technologies **2011**,		3
37	Brain Computer Interfaces for inclusion **2010**,		3
36	Identification of Choroidal Neovascularisation on Fluorescein Angiograms Using Gradient Vector Flow Active Contours **2008**,		3
35	A missing data estimation analysis in type II diabetes databases		3
34	Feature selection via supervised model construction		3
33	Safety Considerations in the Development of Intelligent Environments. *Advances in Intelligent and Soft Computing*, **2011**, 197-204		3
32	A Subarea Mapping Approach for Indoor Localization. *Lecture Notes in Computer Science*, **2011**, 80-87	0.9	3
31	Towards Standardized User and Application Interfaces for the Brain Computer Interface. *Lecture Notes in Computer Science*, **2011**, 573-582	0.9	3
30	KeepWell: A Generic Platform for the Self-Management of Chronic Conditions. *IFMBE Proceedings*, **2016**, 897-902	0.2	3
29	COPD lifestyle support through self-management (CALS) **2014**,		2
28	Superhighway patrolman. *Futures*, **2013**, 50, 101-108	3.6	2

27	Rich context information for just-in-time adaptive intervention promoting physical activity. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2017**, 2017, 849-852	0.9	2
26	RFID network deployment approaches for indoor localisation **2015**,		2
25	Quantifying brain activity for task engagement **2014**,		2
24	Multi-agent System Feedback and Support for Ambient Assisted Living **2012**,		2
23	Topographical brain electrical activity mapping on an IBM-compatible personal computer. *Journal of Biomedical Engineering*, **1989**, 11, 137-40		2
22	Scoping the Potential for Anytime-Anywhere Support Through Virtual Mentors. *Innovations in Teaching and Learning in Information and Computer Sciences*, **2010**, 9, 1-12		2
21	Home Based Self-management of Chronic Diseases. *Lecture Notes in Computer Science*, **2009**, 229-232	0.9	2
20	NOCTURNAL Ambient Assisted Living. *Lecture Notes in Computer Science*, **2011**, 350-354	0.9	2
19	Integration of assistive technology to support self management of chronic disease **2009**,		2
18	Professional development of health informatics in Northern Ireland. *Studies in Health Technology and Informatics*, **2011**, 169, 218-22	0.5	2
17	Home Based Mobile Solution for Video Ambulatory EEG Monitoring **2014**,		1
16	A method for assessing the usability of an on screen display for a brain-computer interface. *International Journal of Computers in Healthcare*, **2014**, 2, 43		1
15	VitalSimML - A well-formed data structure to Capture Patient Monitoring Scenarios to facilitate the training of nurses via computer-based simulation **2015**,		1
14	Towards a generic platform for the self-management of chronic conditions **2014**,		1
13	The NOCTURNAL Ambient Assisted Living System **2011**,		1
12	Pervasive technology to facilitate wellness **2010**,		1
11	A pattern analysis and visualisation system for sleep monitoring in ambient assisted living environment. *International Journal of Computers in Healthcare*, **2012**, 1, 320		1
10	Managing Communication for People with Amyotrophic Lateral Sclerosis: The Role of the Brain-Computer Interface. *Communications in Medical and Care Compunetics*, **2014**, 215-235		1

9   Design and Evaluation of a Smartphone Based Wearable Life-Logging and Social Interaction System. *Lecture Notes in Computer Science*, **2014**, 179-186   0.9   0

8   PC software library for the production of auditory stimuli in cognitive event-related potential experiments. *Computer Methods and Programs in Biomedicine*, **1994**, 45, 283-9   6.9

7   Irish Paediatric Association. *Irish Journal of Medical Science*, **1989**, 158, 27-32   1.9

6   Irish gerontological society. *Irish Journal of Medical Science*, **1989**, 158, 197-200   1.9

5   Automated classification of peripheral movement disorder. *Journal of Microcomputer Applications*, **1990**, 13, 281-290

4   Data Reduction Methods for Life-Logged Datasets. *Computer Communications and Networks*, **2020**, 305-319

3   Mind, the Gap. *Communications in Computer and Information Science*, **2016**, 102-112   0.3

2   A comparison of supervised classification methods for auditory brainstem response determination. *Studies in Health Technology and Informatics*, **2007**, 129, 1289-93   0.5

1   The Use of Artificial Neural Networks for Objective Determination of Hearing Threshold Using the Auditory Brainstem Response195-216